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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/603,579

06/25/2003

Franck Badets

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EXAMINER

LAM, TUAN THIEU

ART UNIT

PAPER NUMBER

2816

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DELIVERY MODE

08/05/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/603,579	<b>Applicant(s)</b> BADETS ET AL.	
	<b>Examiner</b> Tuan T. Lam	<b>Art Unit</b> 2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 4-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 24-29 and 33-36 is/are rejected.
- 7) ☒ Claim(s) 3, 30-32, 37-39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This is a response to the amendment filed 5/27/2008. Claims 1-3 and 24-29 are under examination. Claims 4-23 have been withdrawn from consideration.

#### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-2, 24-29 and 33-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Dai et al. (USP 6,469,585). Figure 3 of Dai et al. reference shows a phase shifter circuit comprising an input for receiving an input signal ( $V_{in}$  input signal) having a specified oscillation frequency, an output delivering an output signal ( $V_{out}$ ) having said specified oscillation frequency and having a variable phase shift with respect to said input signal (figures 4 and 5 shows a delay relationship between the input and output signals, at least one control input receiving a control signal ( $V_{ctrl}$ ) which controls the phase shift of said output signal with respect to said input signal, and a synchronized oscillator (M1, M7 and cross coupled transistors M5 and M6, i.e., astable multivibrator, maintains the oscillation of the output signal, thus, the limitation of synchronized oscillator is met) having at least a synchronization input coupled said input of said variable phase shifting circuit, at least one output coupled to said output of said output of the variable phase shifting circuit, said synchronized oscillator having a variable free

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running oscillation frequency controlled by said control signal (the oscillation frequency of the oscillator is being control by the control signal) as called for in claims 1 and 24-25.

2. Regarding claims 2 and 26-29, the first and second branches are seen as M2-M3; M8-M9 and means for delivering into the first and second branch a respective quiescent current of a same specified value are transistors M1, M4; and M7 and 10 controlled by the control signal.

3. Regarding claim 33, insofar as being understood, that the synchronized oscillator comprises the astable multivibrator having a first branch (anticipated by M2, M3 of Dai et al.) and a second branch (anticipated by transistors M8, M9 of Dai et al.) connected in parallel in between the power supply (Vdd) and ground.

4. Regarding claims 34-36, the first and second branches are seen as M2-M3; M8-M9 and means for delivering into the first and second branch a respective quiescent current of a same specified value are transistors M1, M4; and M7 and 10 controlled by the control signal.

### ***Response to Arguments***

5. Applicant's arguments filed 5/27/2008 have been fully considered but they are not persuasive. Applicant argues that Dai reference frequency tuning circuitry (PMOS transistors M1 and M7) does not tuning the phase is not persuasive. Figures 4 and 5 show the delay relationship between the input and output of the delay stage 32, therefore, the limitation of having output signal phase shifted with respect to the input signal is fully met. .

6. Applicant argues that cross coupled latch M5 and M6 are not synchronized oscillator as claimed is not persuasive. The combination of PMOS transistors M1, M7 and crossed coupled inverters M5 and M6 constitute a synchronized oscillator. The PMOS transistors M1 and M7

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varies the oscillation frequency (column 4, lines 23-25) and the crossed coupled inverter maintains the varied oscillation frequency signal. Thus, the synchronized oscillator is met.

*Allowable Subject Matter*

7. Claims 3, 30-32 and 37-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Lam whose telephone number is 571-272-1744. The examiner can normally be reached on Monday to Friday (7:30 am to 6:00pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Richard can be reached on 571-272-1736. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan T. Lam/  
Primary Examiner, Art Unit 2816

7/7/2008